

AUSTRAL

WINDOW . .
HARDWARE

WARDROBES

"GRIPTITE" ALL-METAL
BLACKBOARD ASSEMBLY

MOVABLE BLACKBOARDS

MULTI-USE
BLACKBOARDS

AUSTRAL SALES CORP.

101 PARK AVENUE
NEW YORK, N. Y.



A TYPICAL GROUP OF AUSTRAL WINDOWS AS USED IN CLASSROOMS
Note wide opening at center, slight opening at top but no opening at sill.

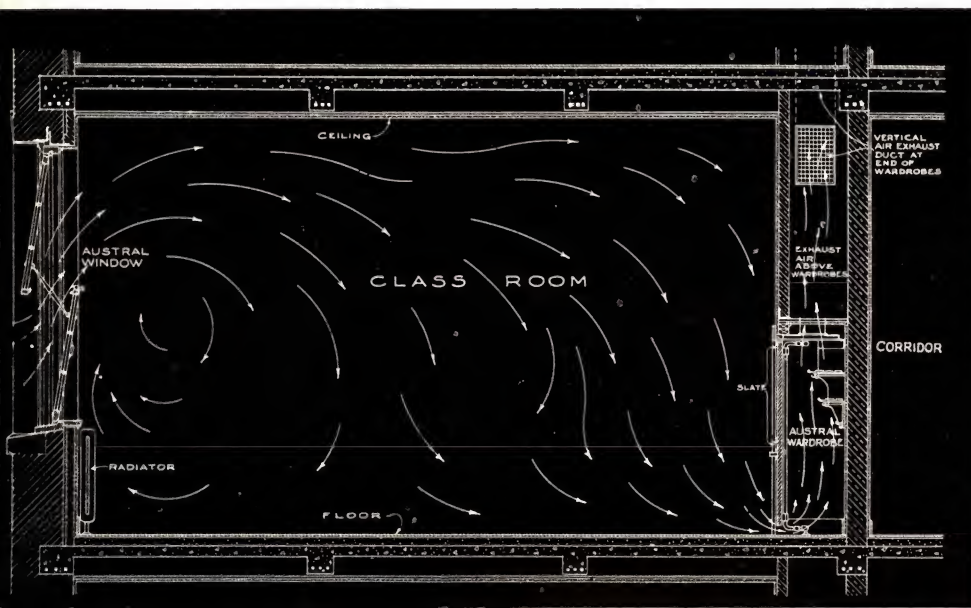
Austral Windows

Permit Ventilation
 without Direct Draft
 Better Control of
 Light and Shade . . .
 Cost no more than
 ordinary Double
 Hung Windows . . .

Advantages

- (1) **A Perfect System of Ventilation without Direct Draft**—The Austral Window affords a perfect system of ventilation, without direct draft—without expensive or complicated equipment or operating costs. The Austral Window may be relied upon to furnish adequate ventilation during the entire school period.
- (2) **Light Is Easily Regulated**—Light is regulated and controlled by the arrangement of Shades on Sash without obstructing the free circulation of air. This arrangement makes an ideal awning effect without added expense.
- (3) **Sash Reversible for Cleaning or Glazing**—The Upper and Lower Sash are both reversible for Cleaning or Glazing, eliminating all risk to window cleaners and making reglazing less expensive.
- (4) **Ease of Operation**—Heavy sash operate as easily as a well-hung door and openings may be regulated as desired. This feature is an Austral characteristic.
- (5) **Additional Light Space Secured**—Additional Daylight Space is secured by the use of Austral Plank Frames. Austral Mullions are about one-half the size of mullions required for double hung windows, yet larger than the mullions of the light steel window which are so small that they give the schoolhouse the "Industrial" appearance.
- (6) **Advantages of the Balance Arms**—Austral Balance Arms eliminate the use of box frames, chains, weights, and pulleys. There is no space for the accumulation of dust and dirt.

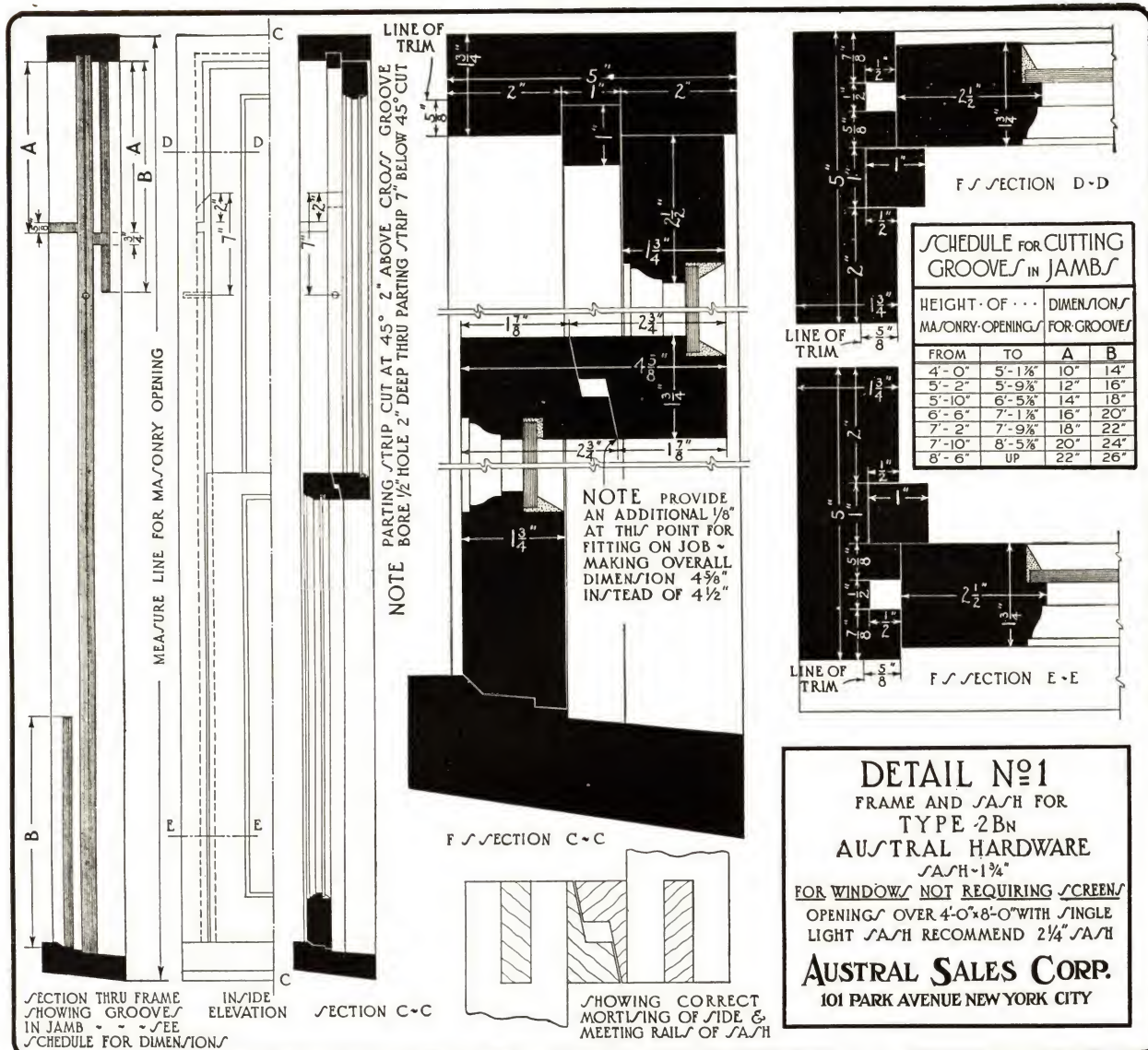
2 DIAGRAM SHOWING CIRCULATION OF AIR CURRENTS
Showing method of ventilating through Austral Windows and Wardrobes.



(7) **Readily Weatherstripped**
 —Wood Austral Windows lend themselves readily to Weatherstripping, and may, without affecting the operation of the sash in the slightest degree, be made tighter than the ordinary double hung window, weatherstripped.

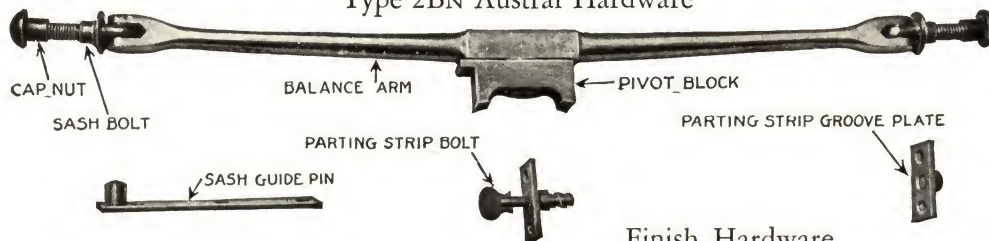
(8) **No Additional Cost**—The cost of Austral Windows with hardware installed is no more, often less than that of double hung windows.

(9) **Installation of Austral Hardware**—It is suggested that the fitting of the sash and the installation of the Austral Hardware be done by us as we can thereby assume the entire responsibility for the perfect operation of the sash.



NOTE—We Supply Only the Austral Hardware—Sash and Frames Supplied by Others

Type 2BN Austral Hardware



Finish Hardware

A set of Type 2BN AUSTRAL HARDWARE consists of the following:

- 2 Balance Arms, with Pivot Blocks, Sash Bolts and Cap Nuts attached
- 4 Sash Guide Pins
- 2 Parting Strip Bolts
- 2 Parting Strip Groove Plates
- Screws for applying all parts

All parts thoroughly Electro Galvanized



Austral Windows

Specifications:-

Wood Windows (Not Requiring Screens)

Type 2BN Austral Hardware

Note: Specifications should also require the fitting of sash and the installation of all Austral Hardware by AUSTRAL SALES CORP., 101 Park Ave., New York, N. Y.

Frames—All exterior frames shall be made from clear white pine, well seasoned. The head and sides shall be finished $1\frac{3}{4}$ x 5 in., and the sill of 2 x 6 in. as per full size detail. The jambs shall be grooved to receive Austral Hardware.

(See Schedule on Austral Detail No. 1, for length of these grooves for various masonry openings.)

The parting strips shall be made of straight-grained white pine 1 x 1 in., in cross section.

Bracing—Frames are to be braced with two diagonal braces at head, and one brace, placed horizontally, in center of frame—all to be left in position until sash are to be hung.

Anchoring—Frames are to be anchored to metal or wood anchors, placed at intervals of 24 in. on sides, and to an anchor, in center of head of frame.

Sash—The sash shall be $1\frac{3}{4}$ in. thick, made of clear, straight-grained white pine, well seasoned. They shall be made true to required size and moulded as per detail.

Glazing—Care must be used in glazing, to keep sash of equal weight, as all sash must be in perfect balance.

Hardware—The above frames and sash shall be fitted with Type 2BN Austral Hardware as made by the AUSTRAL SALES CORP., 101 Park Avenue, New York, N. Y., whose working drawings and instructions shall be considered part of these specifications.

Finish Hardware—Each pair of sash shall be fitted with one Solid Bronze No. 1200N (or Malleable Iron No. 7200 $\frac{1}{2}$ N) Austral Automatic Sash Fast, to be placed at the center of the meeting rails.

Each pair of sash shall be fitted with one pair of Solid Bronze No. 300N (or Malleable Iron No. 7300 $\frac{1}{2}$ N) Austral Offset Pulls placed on the bottom rail of the lower sash.

Poles, Hooks and Hangers—Supply for each classroom steel pole No. 600N, 4 ft. 6 in. in length, equipped with a solid bronze hook No. 700N and a solid bronze pole hanger No. 800N.

NOTE: For single light sash, openings exceeding 4 ft. 6 in. x 8 ft., dimensions of frame and sash should be as follows:

Head and jambs to finish	$1\frac{3}{4}$ x 6 in.
Sill	3 x 7 in.
Sash	$2\frac{1}{4}$ in. thick

Any opening 5 ft. in width by 8 ft. 6 in. or over in height should be equipped with $2\frac{1}{4}$ -in. sash.

Wood Windows (Provisions for Screens)

Type 2CN Austral Hardware

Note: Specifications should also require the fitting of sash and the installation of all Austral Hardware by AUSTRAL SALES CORP., 101 Park Ave., New York, N. Y.

Frames—All exterior frames shall be made from clear white pine well seasoned. The head and sides shall be finished $1\frac{3}{4}$ x 5 in., and the sill, of 2 x 6 in., as per full-sized detail. The jambs shall be grooved to receive Austral Hardware.

(See Schedule on Austral Detail No. 2, for length of these grooves for various openings.)

The parting strips shall be made of straight-grained white pine 1 x 1 in., in cross sections.

Bracing—Frames are to be braced with two diagonal braces at head, and one brace, placed horizontally, in center of frame—all to be left in position until sash are to be hung.

Anchoring—Frames are to be anchored to metal or wood anchors, placed at intervals of 24 in. on sides, and to an anchor, in center of head of frame.

Sash—The sash shall be $1\frac{3}{4}$ in. thick, made of clear, straight-grained white pine, well seasoned. They shall be made true to required size and moulded as per detail.

Glazing—Care must be used in glazing, to keep sash of equal weight, as all sash must be in perfect balance.

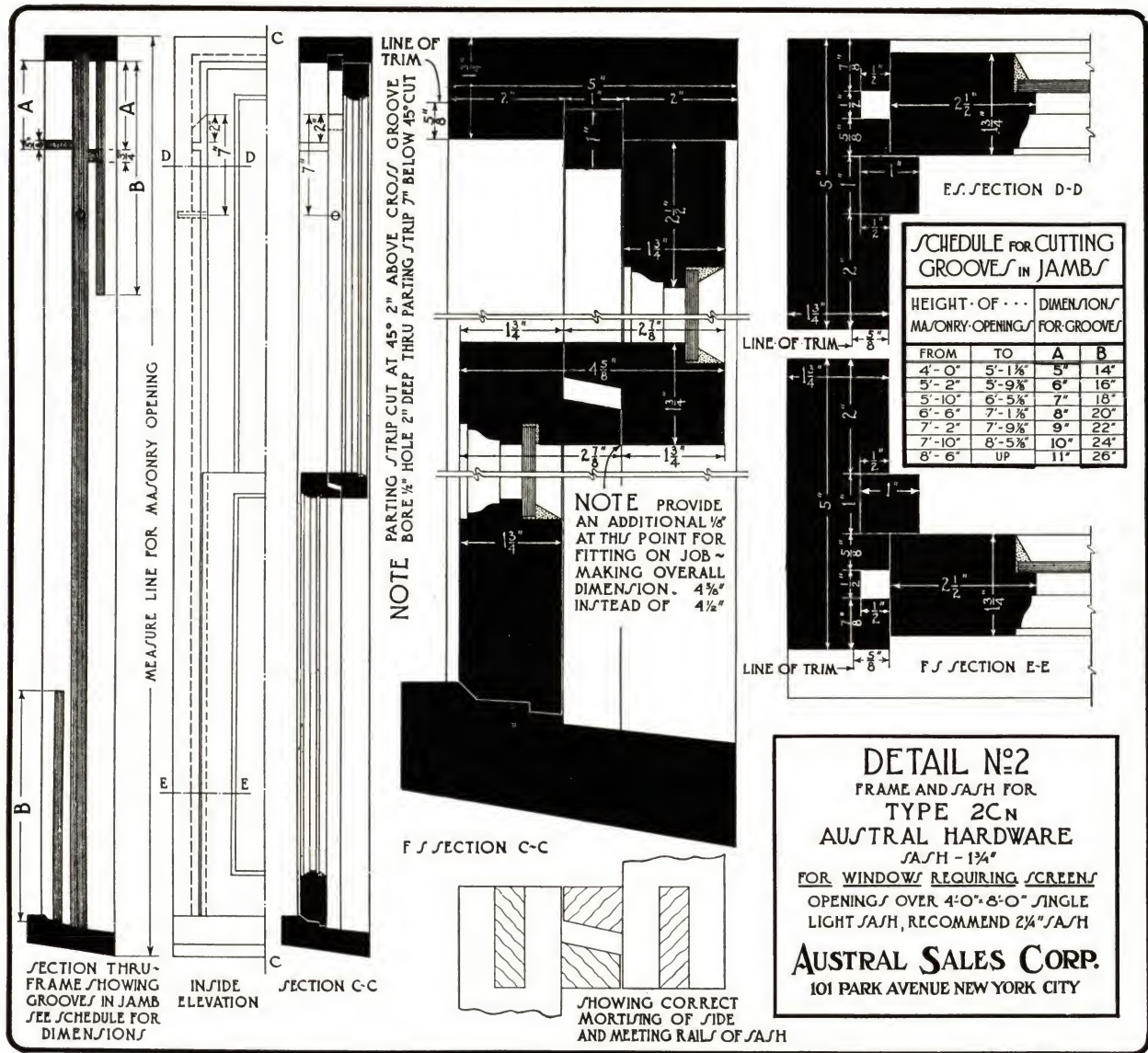
Hardware—The above frames and sash shall be fitted with Type 2CN Austral Hardware, as made by the AUSTRAL SALES CORP., 101 Park Avenue, New York, N. Y., whose working drawings and instructions shall be considered part of these specifications.

Finish Hardware—Each pair of sash shall be fitted with one pair of solid bronze Austral Turnbuckles No. 400, to be placed on the side rails of the lower sash.

NOTE: For single light sash, openings exceeding 4 ft. 6 in. x 8 ft., dimensions of frame and sash should be as follows:

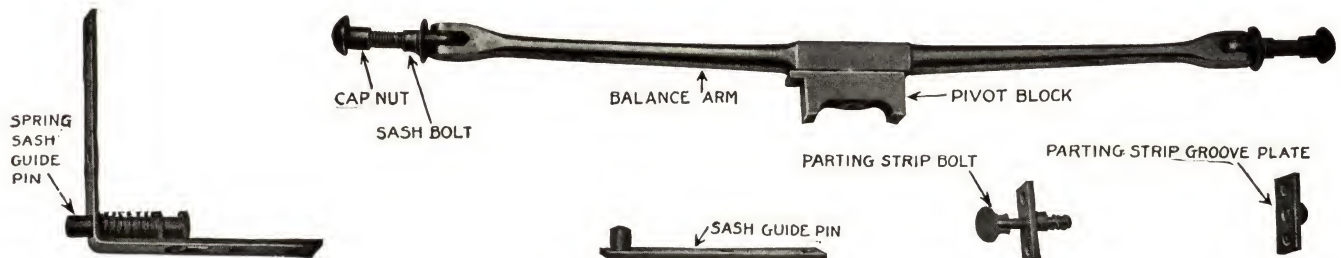
Head and jambs to finish	$1\frac{3}{4}$ x 6 in.
Sill	3 x 7 in.
Sash	$2\frac{1}{4}$ in. thick

Any opening 5 ft. in width by 8 ft. 6 in. or over in height should be equipped with $2\frac{1}{4}$ -in. sash.



NOTE—We Supply Only the Austral Hardware—Sash and Frames Supplied by Others

Type 2Cn Austral Hardware



A set of 2Cn AUSTRAL HARDWARE consists of the following:

- 2 Balance Arms, with Pivot Blocks,
Sash Bolts and Cap Nuts attached
- 2 Sash Guide Pins
- 2 Spring Sash Guide Pins
- 2 Parting Strip Bolts
- 2 Parting Strip Groove Plates
- Screws for applying all parts

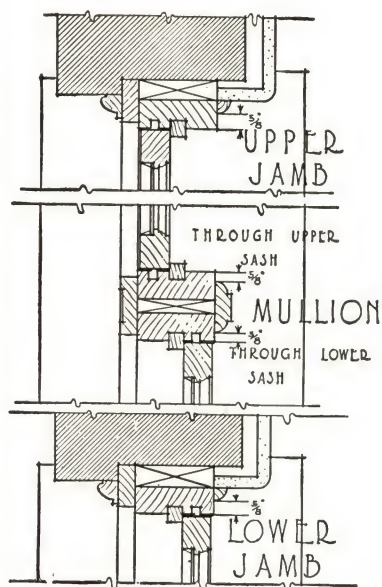
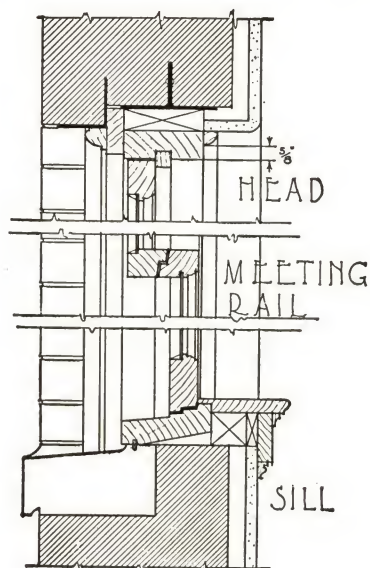
All parts thoroughly Electro Galvanized

Finish Hardware

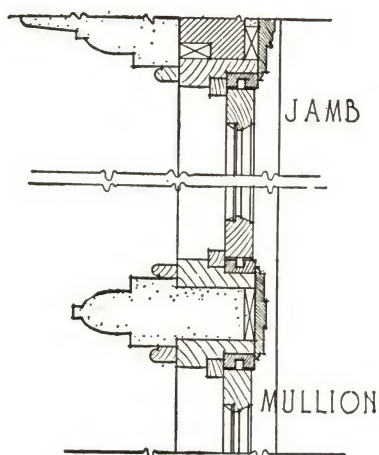


Turnbuckle No. 400

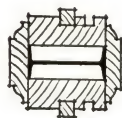
Austral Windows



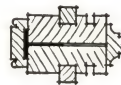
DETAIL "A" AN AUSTRAL WINDOW WITH PLASTER JAMBS SUITABLE FOR SCHOOLS OFFICE BUILDINGS ETC.



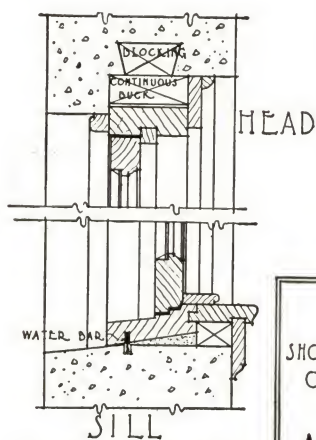
DETAIL "B" AN AUSTRAL FRAME ADAPTED TO STONE WITH HARD WOOD INTERIOR FINISH.



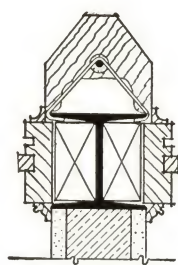
DETAIL "C" MULLION WITH I BEAM REINFORCING



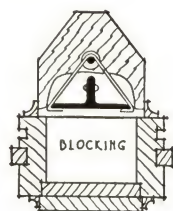
DETAIL "D" MULLION WITH T BAR REINFORCING



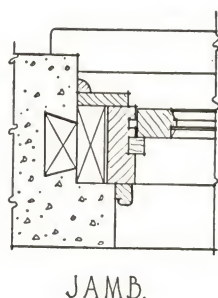
DETAIL "E" SUGGESTED TREATMENT FOR CONCRETE WALLS



DETAIL "F" SHOWING A WINDOW WITH A TERRA COTTA MULLION REINFORCED WITH AN "I" BEAM.



DETAIL "G" SHOWING A TERRA COTTA MULLION REINFORCED WITH ANGLES.

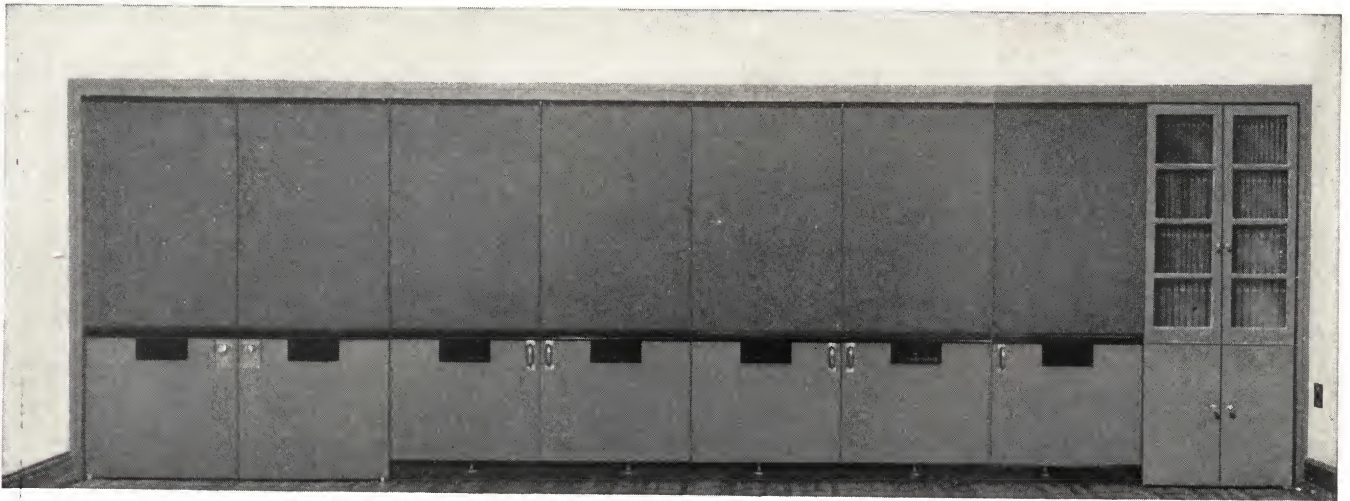


DETAIL N°3

SHOWING VARIOUS CONSTRUCTIONS OF FRAMES, MULLIONS AND INTERIOR TREATMENTS.

AUSTRAL SALES CORP.
101 PARK AVENUE NEW YORK CITY

Austral "Straight 8" All Steel Wardrobes



VIEW OF UNIT SHOWING DOORS IN CLOSED POSITION

Standardization on high-quality steel construction now enables Austral to build a superlative wardrobe unit at a new low price.

The "Straight-8" unit consists of a five doored wardrobe adequate for 40 pupils, teacher's locker, supply closet and bookcase designed to fill entire rear of classroom. Six foot or seven foot heights optional. Any section or sections of the unit may be purchased.

The unit affords true minimum spacing and every inch of it is accessible. (Many attempts to solve the classroom wardrobe problem unfortunately result in reducing space below practical limits. Overcrowding and unsanitary conditions are inevitable.)

Both the teacher's and pupils' compartments are thoroughly ventilated by large grilles directly over wraps.

Cork or process slate may be applied to all except book-

case doors. The process slate, of best quality, is guaranteed for 10 years.

The six-way adjustable hardware on compartment doors and the solid bronze surface hardware are standard equipment.

This unit satisfies an insistent demand for adequate space for all requirements without crowding—designed simplicity—low cost—excellent ventilation—sanitation—ease of cleaning.

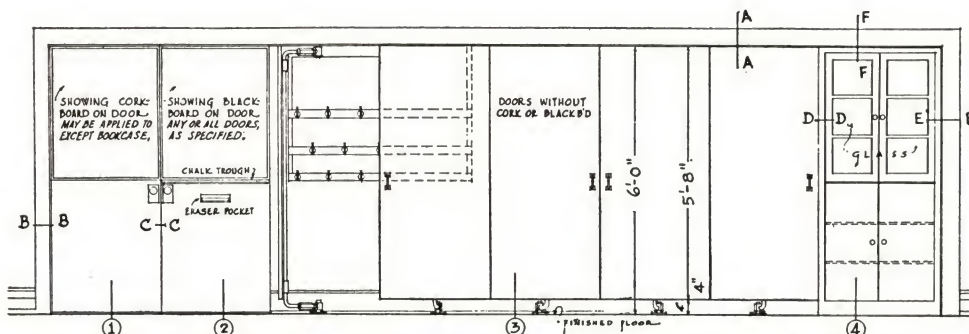
Austral offers the "Straight-8" wardrobe unit as a masterpiece of 25 years of experience in designing and building finer school equipment.

Austral Wardrobes are also furnished with $1\frac{3}{4}$ in. wood doors and $1\frac{3}{8}$ in. flushtype steel doors. The same rugged adjustable hardware steel header jamb and shelving, as indicated on page 8, being used on all types.

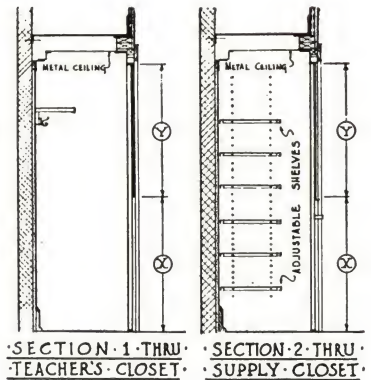
VIEW SHOWING WARDROBE AND TEACHER'S CLOSET WITH DOORS OPEN



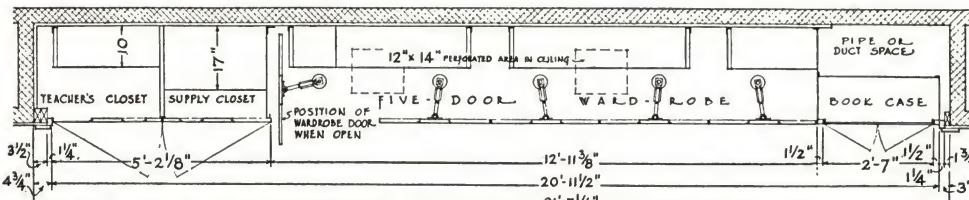
Detail Austral "Straight 8" All Steel Wardrobe



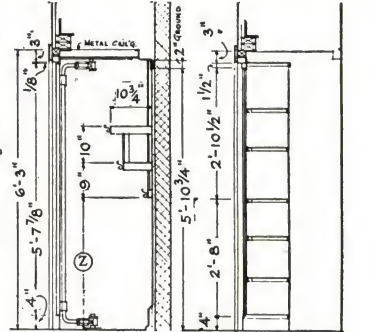
ELEVATION OF WARDROBE WITH TEACHER'S CLOSET SUPPLY CLOSET & BOOKCASE



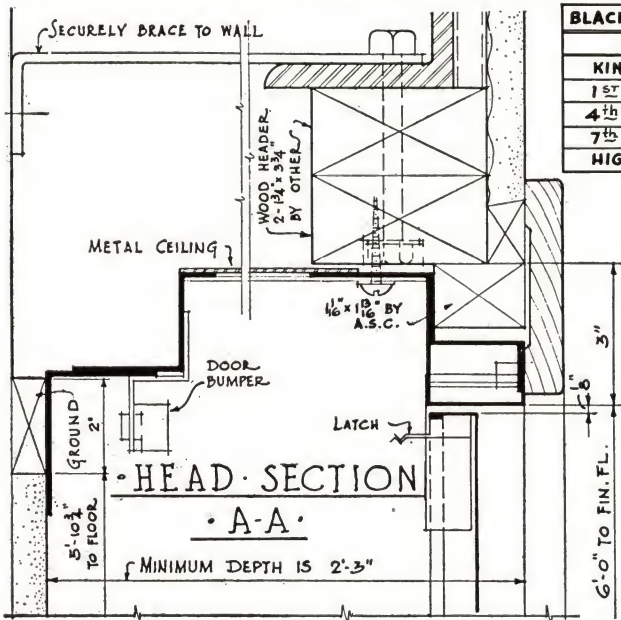
SECTION 1 THRU TEACHER'S CLOSET SECTION 2 THRU SUPPLY CLOSET



PLAN OF WARDROBE WITH TEACHER'S CLOSET SUPPLY CLOSET & BOOKCASE

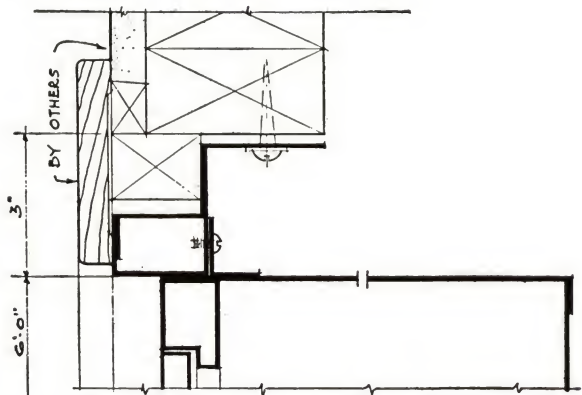


SECTION 3 THRU WARDROBE SECTION 4 THRU BOOKCASE



HEAD SECTION A-A

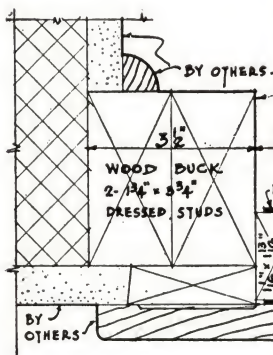
BLACKBOARD & SHELVING DIMENSIONS			
GRADES	X	Y	Z
KINDERGARTEN	25 3/8"	46 1/4"	32"
1 ST , 2 ND , 3 RD	27 5/8"	44 1/4"	32"
4 TH , 5 TH , 6 TH	29 5/8"	42 1/4"	36"
7 TH , 8 TH	35 5/8"	36 1/4"	42"
HIGH SCHOOL	35 5/8"	36 1/4"	42"



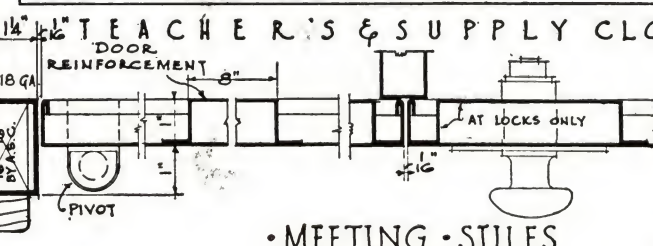
HEAD SECTION F-F

SCHEDULE OF STANDARD OPENING DIMENSIONS					
ARRANGEMENT	WARDROBE ONLY	WARDROBE & BOOKCASE	WARDROBE & 1 CLOSET	WARDROBE & BOOKCASE & 1 CLOSET	WARDROBE & BOOKCASE & 2 CLOSETS
METAL JMB.WDT.	12'-11 3/8"	15'-9 3/8"	15'-6 1/2"	18'-5 1/2"	20'-11 1/2"
WOOD JMB.WDT.	13'-1 7/8"	15'-11 7/8"	15'-9"	18'-8"	21'-2"

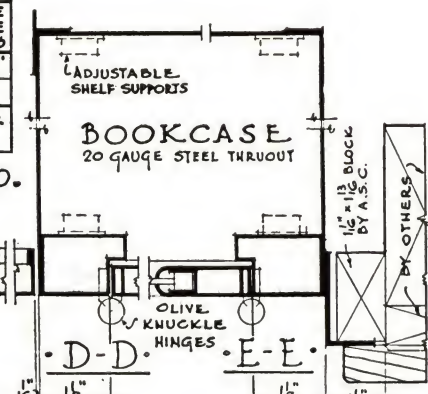
NOTE: THE BOOKCASE IS INTERCHANGEABLE IN LOCATION WITH EITHER THE TEACHER'S CLOSET OR THE SUPPLY CLOSET



JAMB SECTION B-B



MEETING STILES SEC. C-C



JAMB SECTIONS

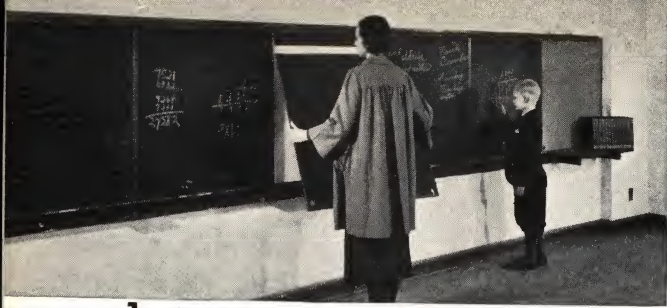
Specification:—

Austral "Straight 8" School Wardrobe

1. **Wardrobes, General**—Pupils' Wardrobes, teacher's closet, storage closet, as shown on plans and elevations, shall be equipped with flush steel doors provided with door control hardware, latches, locks and pivots. Jambs, heads, shelving, cross bracing and wall angles to be of steel of gauge specified. The bookcase shall be provided with two (2) hinged doors with glazing strips and with necessary hardware.
Pupils' Wardrobe to be equipped with coat racks and suitable hooks.
Teacher's closet to be provided with one (1) steel shelf, coat hooks and mirror.
Storage closet to be provided with five (5) adjustable steel shelves.
Bookcase to be provided with five (5) steel shelves.
All to be furnished and erected by the Austral Sales Corp., 101 Park Avenue, New York, N. Y. The recesses to receive this unit and all necessary grounds, bucks, trim, painting or staining to be furnished and installed by others.
2. **Doors—Metal**—Doors, except for bookcase, shall be flush type, with edges returned and corners welded of height indicated on detail, formed up of 16 gauge steel reinforced. Bookcase doors to be hollow steel construction.
3. **Hardware**—Door control hardware shall consist of rigid offset pivot arms, extending from the floor pivot to the top of wardrobe. The pivot arms to be equipped with a "six-way" adjustment device, universal joints, and ball bearing pivots, all machined to accuracy.
4. **Finish Hardware**—All wardrobe doors to be equipped with "anti-rattle" latches with handles of solid bronze. Teacher's closet and supply closet doors to be provided with bronze pivots, pivot sockets and a special "anti-rattle" lock with two keys. Bookcase doors to be equipped with olive knuckle butts and suitable lock with two keys.
5. **Metal Jambs**—Jambs and head to be of 16 gauge steel, cross bracing 20 gauge, wall angle 11 gauge. The entire unit to be covered with 20 gauge steel welded to cross bracing. Grilles to be provided in the ceiling of pupils' wardrobe compartment and teacher's closet.
6. **Wardrobe Interiors**—Each section of the wardrobe to be provided with standard coat rack suspended from cross bracing, consisting of two shelves and one hanging strip, provided with forty (40) double prong coat hooks. Provide metal partitions between storage closet, teacher's closet and wardrobe.
7. **Operation**—The door operating mechanism shall be so constructed as to hold the face of the doors, when closed, in perfect alignment and in a straight and rigid position, providing a continuous flush surface.
8. **Finish**—All metal work for the entire unit to receive two coats of standard brown enamel, baked on.
9. **Guarantee**—The entire wardrobe and equipment shall be guaranteed against all mechanical defects, for a period of one year from the date of final acceptance of the building. No painting or staining of metal work, glass or glazing, other than above specified to be included in this contract.

Add the Following if Processed Slate is Required:

10. **Processed Slate**—Equip all wardrobe, teacher's closet and storage closet doors with best grade processed slate, $\frac{3}{8}$ " thick, extending the full width of doors, held in position by means of metal angles.
11. **Chalk Rails, Etc.**—Provide metal slate angles and metal chalk rails directly under the slate angle, extending the full width of the door; and eight-inch metal eraser pocket with a reversible dust tray. All to be of 13 gauge steel.
12. **Cork**—Equip all wardrobe, teacher's closet and storage closet doors with best grade cork $\frac{1}{4}$ in. thick extending the full width of doors, cemented to the face of the doors and held in position by means of metal angles at top, bottom and sides.



1 AS A BLACKBOARD—Showing Ease of Handling



2 AS A DISPLAY BOARD—With the Cork Side Out and the Blackboard Side Reversed



3 PART DISPLAY BOARD AND PART BLACKBOARD—With Work Shelf for Display or Modeling



4 AS AN ART EASEL—Showing Position of Panels at an Angle at the Right Height for Students



5 AS A CORRIDOR EXHIBITION BOARD—Quickly Set up or Removed from Permanently Installed Hooks

Austral Multi-Use Blackboard Fixture

The Multi-Use Blackboard Fixtures—Increases the functions of the classroom by instantly adapting it for Art, Music, Nature Study, Craft, Exhibition, or other study purposes.

This means that, since it is no longer necessary to provide special rooms for the foregoing purposes, construction costs are greatly reduced.

And, in old buildings, all such special rooms may now be released for standard purposes. The teacher finds this device a real help in imparting knowledge to the pupil, and that it creates interest in school work more readily.

It will be found desirable for use wherever lectures are given, bulletins posted, or art work displayed. Also for special uses in churches, offices and factories.

(No. 1) As a Blackboard—Every panel is reversible. Panels with blackboard one side and cork on reverse side are usually preferred, but panels may be had with both sides blackboard or cork.

Obviously, these reversible panels in reality give the classroom double the ordinary amount of working surface. For example, 10 panels would present 90 square feet of blackboard surface, but another 90 square feet of cork surface may be instantly brought into use by merely reversing the 10 panels.

The instructor may prepare the work in advance on the blackboard side and then divulge it to the students at the desired time.

The panels are light weight and easily reversed.

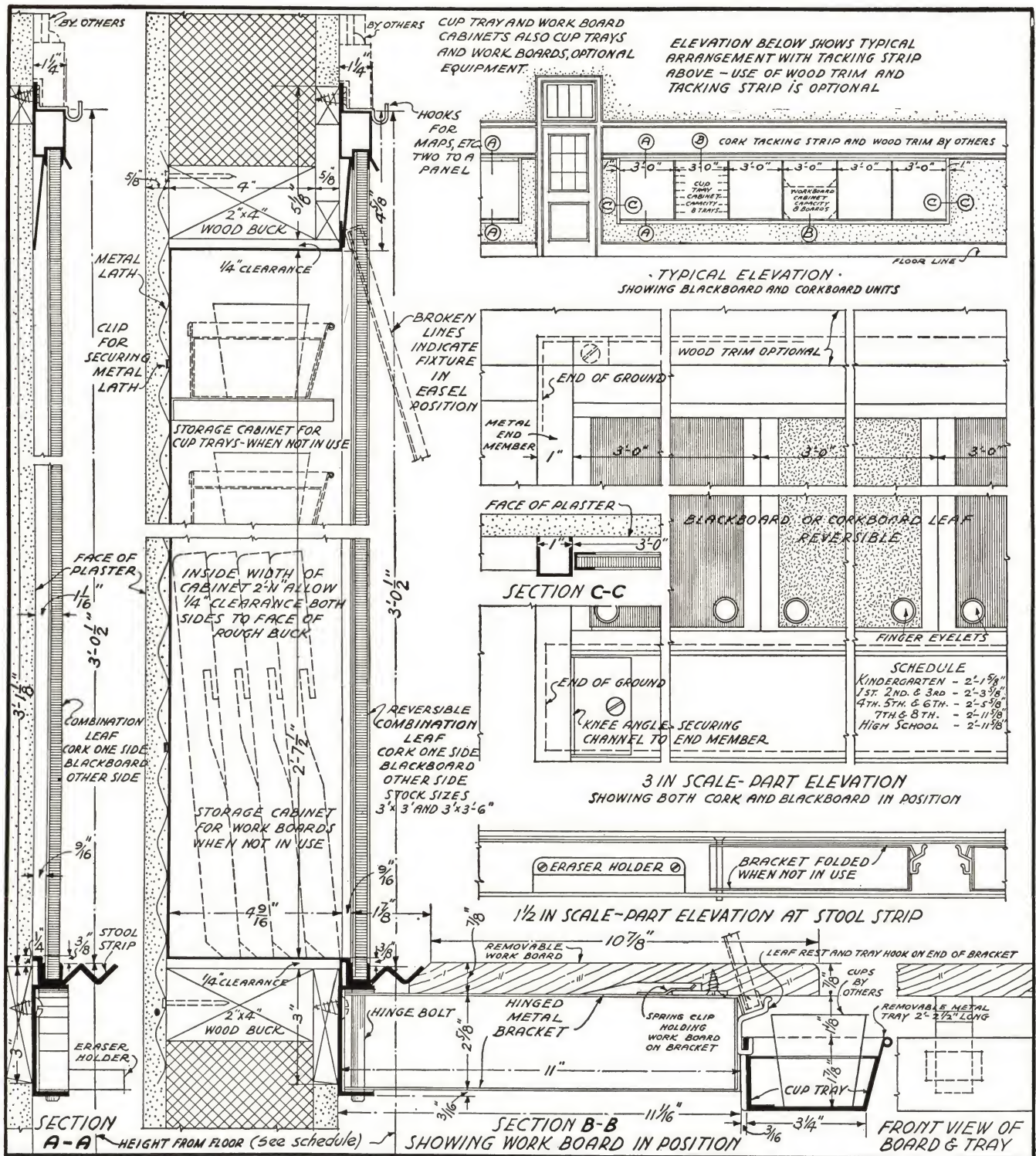
In old buildings, installation is made directly over existing slate, thus doubling the utility of this area.

(No. 2) As a Display Board—Any desired portion of blackboard area may be converted into display area by reversing the leaf, bringing the cork side out. Educational material may be readily pinned to the cork side. Whether for exhibition or for class instruction the work displayed is always at the proper visual height.

(No. 3) As a Display Shelf and Work Board—With leaf in vertical position, the work boards placed upon brackets and engaged thereto, provide display shelves or work benches. These work benches are sufficiently strong for all ordinary school craft, such as Nature Study, Clay Modeling, etc. They may also be used for displaying completed work, or as a base for chart standard. Unquestionably, the ingenious teacher will find many other uses.

(No. 4) As an Art Easel—Two pivoted metal brackets (attached to the channel below the rail strip) permit the leaf to be brought forward into easel position as shown above. The color tray catches any drip from painting, thus both wall and floor are properly protected. The youngest student can set up this arrangement instantly. No part of the easel touches the floor and it is always at proper height.

(No. 5) As a Corridor Exhibition Board—The leaf of the fixture becomes a movable display board when hung from permanently installed hooks or pegs, the finger eyelets being utilized for this purpose. The instructor may prepare his display in the classroom before placing the leaf in the corridor position, thus avoiding confusion in the corridor, damage to its wall surface, etc.



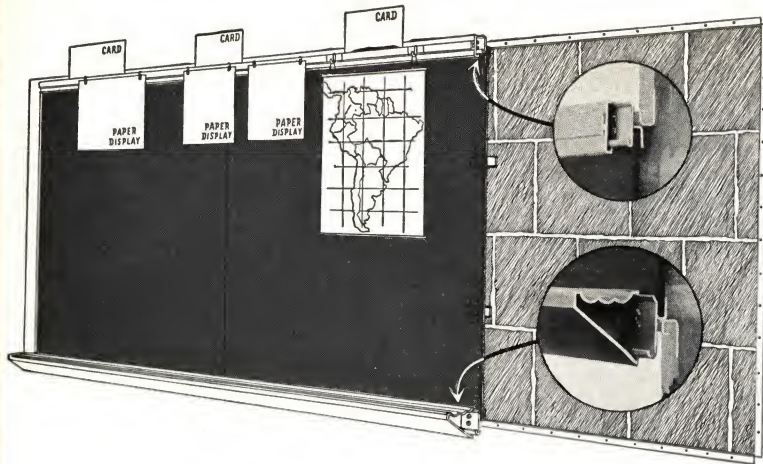
Specifications:—Austral Multi-Use Blackboard Fixture

Furnish and install in all classrooms where indicated the Multi-Use Blackboard Fixture, consisting of head strip, stool strip with channel, brackets and eraser holder, combination blackboard and cork board leaf, work shelf and paint tray and necessary metal storage cabinets for paint trays and work boards. This equipment shall be equal to that manufactured by the AUSTRAL SALES CORP., 101 Park Avenue, New York, N. Y., whose working drawings and details shall be considered a part of this specification. Any grounds, trim, painting or staining other than that specified herein shall be furnished and installed by others.

Austral Metal Storage Cabinets for the storage of paint trays and work boards shall be located in the walls directly back of the blackboard panels and shall be either built into the walls before plastering or provision made for their insertion after the plastering has been completed as directed by the architect.

Face of cabinet shall be set flush with face of finished plaster.

Rough wood bucks and grounds shall be provided and shall be accurately set by others in accordance with detail drawings as supplied by the blackboard manufacturer.



Austral "Griptite"

ALL METAL

Blackboard Assembly

"MASTERS PATENTS"

Austral "Griptite" All-Metal Blackboard Assembly, with the Blackboards mechanically clamped in metal grounds, were first introduced in Pennsylvania in 1928. Repeated installations by prominent architects prove that it has stood the test of continuous use with entire satisfaction.

Austral "Griptite" is the original blackboard assembly with a continuous steel ground and an independent means of securing the blackboard within it. This is recognized as the best and most economical method yet devised.

Practically all failures and difficulties experienced in connection with the usual type of blackboard frames can be traced

to warpage or loosening of the foundation or wood ground strips. Continuous weight or pressure after years of service throw blackboards out of alignment.

Austral "Griptite" All-Metal Frames eliminate these difficulties. The grounds, continuous 16 gauge steel, are bolted, toggled or screwed to the bare walls before plastering. The adjustable clamps insure perfect and permanent alignment of slate to an even surface. Variations in thickness and curvature of blackboard material present no difficulties.

Trim and chalk rails are of aluminum or steel and are of the snap-on type, eliminating unsightly screws or other fasteners.

Display rail, as part of the finished trim, completes the assembly for practical teaching methods.

Advantages

- (1) A neat, sanitary and durable installation.
- (2) Keeps blackboards permanently tight.
- (3) Repairs and maintenance are entirely eliminated.
- (4) Variation in thickness and curvature of blackboard material present no difficulties.
- (5) Simplicity of construction and ease of installation.
- (6) Display rail, with sliding map hooks, an integral part of the upper trim member.

Specifications:—

METAL BLACKBOARD AND BULLETIN BOARD FRAMES

The following are specifications covering the use of Austral "Griptite" Metal Blackboard Assembly for blackboards and bulletin boards with additional specifications to be incorporated under "Blackboards," "Bulletin Boards," "Painting" and "Plastering."

All Metal Blackboard and Bulletin Board Frames are to be "Griptite" Type, as manufactured by Austral Sales Corporation, 101 Park Avenue, New York City, as detailed, or approved equal.

Grounds—Erect continuous steel grounds of 16 gauge galvanized steel where blackboard and bulletin board spaces are shown. These grounds to be securely fastened by means of toggle bolts, expansion bolts or straight bolts with 1 in. washers, as conditions may require. Grounds on Gypsum walls to be bolted through Gypsum blocks with straight bolts reinforced with 1 in. washers. Fastenings to be made through holes provided in grounds, and are to be spaced not over 15 in. Walls other than those to be plastered shall have channel ground of same material as chalk rail and trim, and to be mitered at corners forming a part of completed trim. Space inside grounds to be $\frac{3}{8}$ in. greater than size of slate to be installed.

Clips and Clamps—Trim and chalk rail clips to be 2 in. wide, 14 gauge Cadmium plated steel, formed so as to receive clip-on trim and to lap edges of slate not less than $\frac{1}{4}$ in. Clamps are to be 2 in. wide made of 14 gauge Cadmium plated steel and shall be mechanically fastened to ground in such a manner as to provide permanent alignment of blackboard face.

Attaching Clips and Clamps—Clips and clamps are fastened to grounds by Blackboard Erector at time of setting slate. Clips and clamps shall be placed adjacent to all joints and corners on vertical and horizontal grounds and at intermediate points not over 15 in. on centers. For additional information see Blackboard Specifications.

Display Rail—Intermediate (or top) trim of frames on front (and corridor) walls shall be of the display type for card, paper and map display, with 4 map hooks per 10 ft. of rail.

Chalk Rail and Trim—(Here specify either Aluminum or Steel.)

Aluminum—Chalk rail $\frac{3}{8}$ in. thick, trim $\frac{1}{8}$ in. thick, size as detailed Finish—"Dull Alumilite" or "Natural as extruded."

Steel—Chalk rail and trim to be 20 gauge cold rolled steel as detailed. Finish to be baked prime coat (unless otherwise specified).

Trim and Chalk Rail Installation—After installation of slate and bulletin boards, snap chalk rail and trim over clips. Trim to be mitered at all outside corners and to butt at all other points. Where Bulletin

Boards occur, trim is substituted for chalk rail. Ends of chalk rail are closed by attaching metal end castings.

BLACKBOARDS: (Here specify quality of materials, etc.)

Slate blackboards shall be installed in all metal frames in accordance with the following requirements.

Clips and clamps provided by others shall be used to support blackboards around all outside edges and spaced as called for under *Metal Blackboard and Bulletin Board Frames*.

Adjustment at center of joints to be made by means of well dried wood wedges set in plastic cement. Adjustment at top and bottom is taken care of by clamps. (Blackboards shall be spotted with plastic cement at approximately 18 in. intervals throughout entire length of space, for sound deadening.) Joint cement shall be waterproof and as recommended by the blackboard manufacturers. Joints to be rubbed down and finished to the satisfaction of the Architect.

Blackboard setter shall familiarize himself with the frame construction, and exercise care in having face of blackboards even with face of plaster.

BULLETIN BOARDS: (Here specify materials, etc.)

Display boards $\frac{1}{2}$ in. thick shall be placed in steel grounds with flange arranged to receive $\frac{1}{2}$ in. materials. Notch over possible screw heads in steel grounds. Joints allowed as follows:

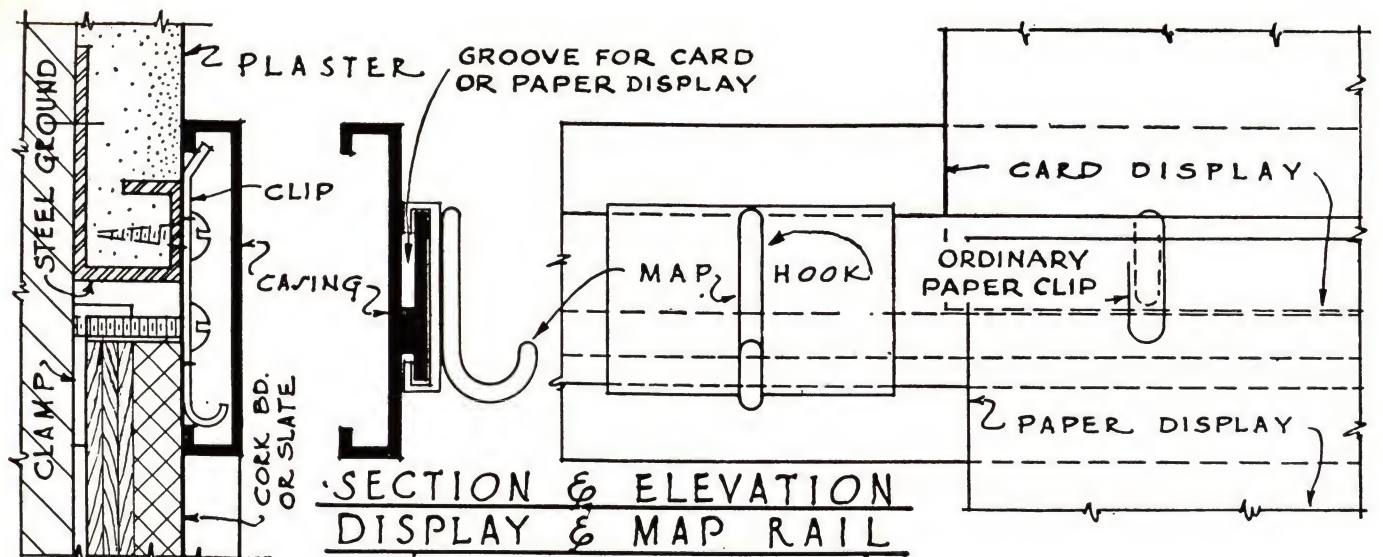
PAINTING SPECIFICATIONS: No painting required if Aluminum Trim is used.

If Primed Steel is used the Painter shall finish in the following manner:

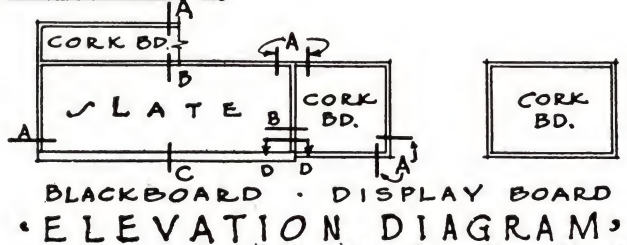
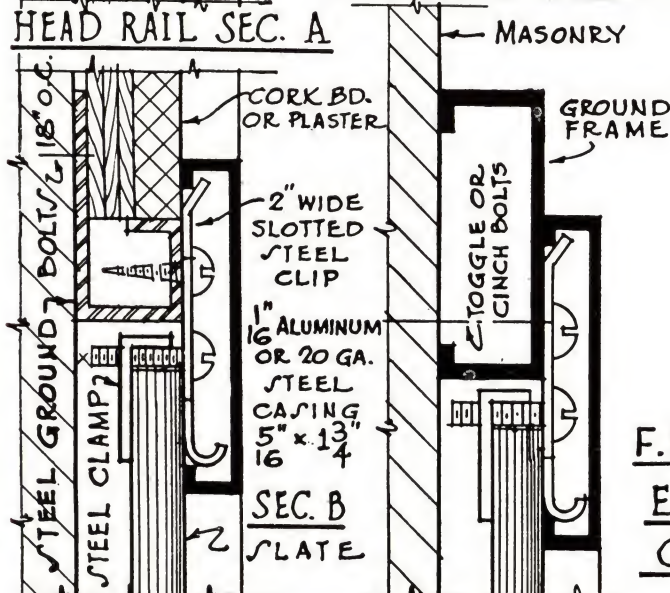
PLASTER SPECIFICATIONS: No plaster required in back of Blackboards or Bulletin Boards. Plaster outside of Blackboard and Bulletin Boards to finish flush with face of steel ground.

MOVABLE BLACKBOARDS

Austral counterbalanced or counterweighted blackboards, with all metal frames, ball bearing sheaves and guide wheels at four corners of each panel, are used extensively in College and High School lecture rooms. Detailed information on request.

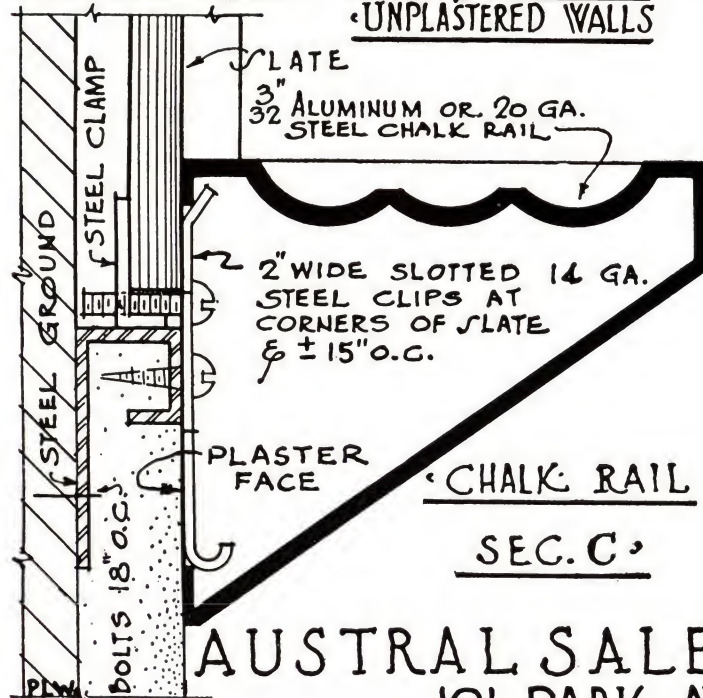


HEAD RAIL SEC. A



F.S. PLAN OF
END CAP OF
CHALK RAIL

INTERMEDIATE RAIL HEAD & JAMB SEC. UNPLASTERED WALLS



FULL SIZE DETAILS OF
GRIP TITE
METAL TRIM ASSEMBLY
FOR BLACKBOARDS &
DISPLAY BOARDS
MASTER'S PATENTS.

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The word "Austral" is written in a large, elegant, cursive script. A thin horizontal line crosses the middle of the letters, and a thin vertical line extends upwards from the left side of the 'A'.